

Title (en)

3-D PRINTING USING INTERMEDIATE TRANSFER BELT AND CURABLE POLYMERS

Title (de)

3D-DRUCKEN MIT ZWISCHENÜBERTRAGUNGSBAND UND HÄRTBAREN POLYMEREN

Title (fr)

IMPRESSION 3D AU MOYEN D'UNE COURROIE DE TRANSFERT INTERMÉDIAIRE ET DE POLYMÈRES DURCISSEBLES

Publication

**EP 3243658 A1 20171115 (EN)**

Application

**EP 17169600 A 20170504**

Priority

US 201615152631 A 20160512

Abstract (en)

3-D printing transfers build material and support from an intermediate transfer belt (110), ITB, to a platen (118). The build material is the same as the support material, except that the build material includes a photoinitiator and the support material does not. The platen moves to make contact with the ITB, and the ITB transfers successive layers (102) of build material and support material each time the platen contacts the ITB. The platen and a portion of the ITB that is adjacent the platen are heated prior to the platen contacting the ITB, and the same is exposed so as to crosslink polymers of build material, without crosslinking polymers of support material. The polymers of build material being crosslinked and the polymers of support material not being crosslinked makes the support material selectively soluble in a solvent.

IPC 8 full level

**B29C 48/18** (2019.01); **B29C 64/141** (2017.01); **B29C 64/40** (2017.01); **B33Y 10/00** (2015.01); **B33Y 30/00** (2015.01); **B33Y 70/00** (2015.01); **G03G 15/22** (2006.01)

CPC (source: CN EP KR US)

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Citation (applicant)

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- US 7250238 B2 20070731 - FROMM MARY C [US], et al
- US 8488994 B2 20130716 - HANSON WILLIAM J [US], et al

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**EP 17169600 A 20170504**; CN 201710256276 A 20170419; JP 2017085347 A 20170424; KR 20170050864 A 20170420; US 201615152631 A 20160512; US 201816059496 A 20180809